

NTP Nonneoplastic Lesion Atlas

Heart - Cyst

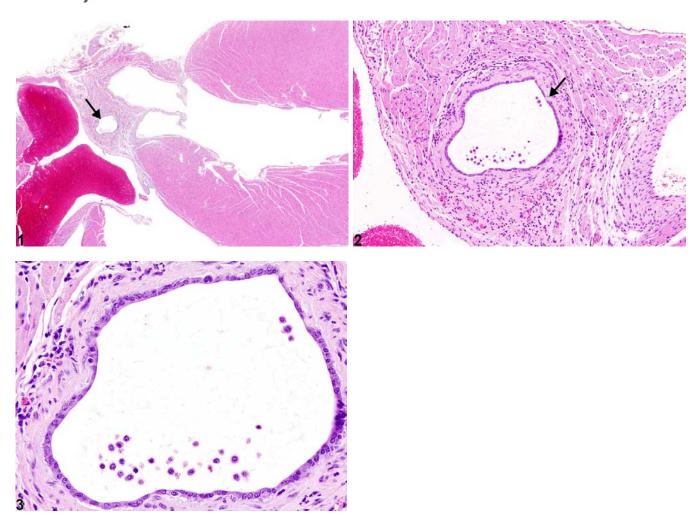


Figure Legend: Figure 1 Heart - Cyst in a male BALB/c mouse from a subchronic study. A cyst is present in the atrial septum (arrow). **Figure 2** Heart - Cyst in a male BALB/c mouse from a subchronic study (higher magnification of Figure 1). Inflammatory cells are present in the tissue around the cyst (arrow). **Figure 3** Heart - Cyst in a male BALB/c mouse from a subchronic study (higher magnification of Figure 1). The cyst is lined by flattened epithelium.

Comment: Cysts (Figure 1, Figure 2, and Figure 3) are defined as epithelium-lined sacs, and in the heart, they are typically located within the atrium or near the interatrial septum. The lining epithelium is typically flattened. Cysts may be the result of a developmental malformation, possibly of thyroglossal duct origin. Cysts should be differentiated from cystic, ectopic thyroid or thymic tissue in the heart.





NTP Nonneoplastic Lesion Atlas

Heart - Cyst

Recommendation: Heart - Cyst should be diagnosed but should not be graded. The location of this lesion should be described in the pathology narrative. A diagnosis of "Cyst" should be used when the tissue of origin cannot be definitively identified. If the tissue is determined to be of thymic or thyroid origin, a diagnosis of "Heart - Ectopic tissue" is preferred.

References:

Elwell MR, Mahler JF. 1999. Heart, blood vessels, and lymphatics. In: Pathology of the Mouse: Reference and Atlas (Maronpot RR, Boorman GA, Gaul BW, eds). Cache River Press, Vienna, IL, 361-380.

Authors:

Crystal L. Johnson, DVM, DACVP Veterinary Pathologist II Charles River Laboratories, Inc. Research Triangle Park, NC

Abraham Nyska, DVM, Diplomate ECVP, Fellow IATP Expert in Toxicologic Pathology Visiting Full Professor of Pathology Sackler School of Medicine, Tel Aviv University Timrat, Israel